



“HOT SWAPPABLE” RF TRAYS, 1:1 REDUNDANT MODELS

These Amplitude/Slope Equalizer Systems offer independent gain and slope adjustment in the L-band frequencies. These systems are designed to compensate for long cable run loss and to provide system redundancy. The 1:1 Redundant System provides automatic and manual switchover modes of operation.

STANDARD FEATURES

- RS422, RS485 and 10/100 Base-T Ethernet
- Fault tolerant design
- Fully redundant, hot swappable RF trays with power supplies, 1:1 redundant models
- Remote status
- Module current fault detection
- Front panel module current alarm
- Auto/manual mode
- Off-line input/output access (1:1 redundant units)

OPTIONS

- Input/output signal monitors
- Increased gain
- Increased output power

Frequency (MHz)	Dual Channel Model Number	1:1 Redundant Model Number
950-1450	EDR-950145	E1R-950145
950-1750	EDR-950175	E1R-950175
950-2150	EDR-950215	E1R-950215
1000-2000	EDR-100200 <i>(Note)</i>	E1R-100200 <i>(Note)</i>

Note: Improved second harmonic performance, 60 dBc at 0 dBm output power, maximum gain, 0 dB slope

SPECIFICATIONS

Gain	15 dB minimum (at center frequency and 6 dB slope), 18 dB nominal (at 0 dB slope)
Gain Adjust	20 dB minimum
Amplitude Slope Adjust	0 to 6 dB (see Figure 1)
Amplitude Flatness	1.5 dB peak-to-peak maximum (at 0 dB slope)
Power Output (1 dB Compression)	+10 dBm minimum (at maximum gain and 0 dB slope)
Third Order Intercept Point	+20 dBm minimum (at maximum gain and 0 dB slope)
Channel-to-channel Match	2.5 dB maximum
Noise Figure	10 dB maximum (at maximum gain and 0 dB slope)
Spurious (Signal Independent)	Below thermal noise
AM/PM Conversion	0.5°/dB maximum at 0 dBm output
Isolation	50 dB minimum
Input/Output Return Loss	18 dB minimum
Input/Output Impedance	50 ohms

OPTIONS

12-1. Input Monitor	-20 dBc nominal level
12-2. Output Monitor	-20 dBc nominal level
12-3. Increased Output Power-	
Power Output (1 dB Compression)	+20 dBm minimum (at maximum gain and 0 dB slope)
Third Order Intercept Point	+30 dBm minimum (at maximum gain and 0 dB slope)
Output Return Loss	14 dB minimum
12-4. Increased Gain	30 dB minimum (0 dB slope)

PRIMARY POWER REQUIREMENTS

Voltage.....	90-250 VAC
Frequency.....	47-63 Hz
Power Consumption	25W typical
Fuse	T1.25A

SUMMARY ALARM

Contact closure/open for DC voltage and/or amplifier alarm. Status alarm readout on remote control bus.

PHYSICAL

Weight	10 pounds (4.5 kg), nominal without rack slides 14 pounds (6.5 kg), nominal with rack slides
Chassis Dimensions	19" x 1.75" panel height x 20" maximum
Connectors -	
RF.....	SMA female
Summary Alarm	DE-9P
Remote Interface.....	DE-9S for RS422, RS485 RJ-45 female for Ethernet
Primary Power.....	IEC-320

ENVIRONMENTAL

Operating -

Ambient Temperature	0 to 50°C
Relative Humidity	Up to 95% at 30°C
Altitude	Up to 10,000 feet

Non-operating –

Ambient Temperature	-50 to +70°C
Relative Humidity	Up to 95% at 40°C
Altitude.....	Up to 40,000 feet
Shock and Vibration	Normal handling by commercial carriers

